

CLAIMS

1. A balancing machine comprising a shell or frame suspension-mounted on a bed via elastic supports, a shaft rotatably supported by said frame at two points spaced a predetermined distance apart and having that end emerging from the bed provided with means for locking a wheel,
5 drive means for rotating said shaft, and force transducer means applied between the bed and the shaft, characterised in that the drive means are rigid with the suspension-mounted frame, between the bed and frame there being interposed an elastic support comprising at least two coplanar
10 leaf springs symmetrical about the shaft axis and positioned in a plane perpendicular to the plane containing the axes of said drive means, of said shaft and of said transducer means.
2. A machine as claimed in claim 1, characterised in that said drive means are drive means of belt type, said elastic support comprising at
15 least two coplanar leaf springs contained in the plane perpendicular to said belt drive means.
3. A machine as claimed in claim 1, characterised in that the force transducer means are applied on the same side of the shaft.
4. A machine as claimed in claim 1, characterised in that the force
20 transducer means are applied on opposite sides of the shaft.
5. A machine as claimed in claim 1, characterised in that the force transducer means are applied at the minimum distance apart compatible with their overall size.
6. A machine as claimed in claim 1, characterised in that the force

transducer means are applied directly between the shaft and the bed.

7. A machine as claimed in claim 1, characterised in that the force transducer means are applied between the bed and a frame which rotatably supports the shaft.

5 8. A machine as claimed in claim 1, characterised in that said drive means are drive means of roller type, said elastic support comprising at least two coplanar leaf springs contained in the plane perpendicular to the plane containing the axes of the roller and of the moving assembly.

9. A machine as claimed in claim 1, characterised in that said drive 10 means are drive means of gearwheel type, said elastic support comprising at least two coplanar leaf springs contained in the plane perpendicular to the plane containing the axes of the drive pinion and of the moving assembly.